What is claimed:

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1. An image processing circuit, comprising:

a pixel circuit operable to,

compare a pixel value to a threshold value, and

modify the pixel value if the pixel value has a predetermined relationship to the threshold value.

2. The image processing circuit of claim 1 wherein the pixel value comprises a luminance pixel value.

3. The image processing circuit of claim 1 wherein the pixel value comprises a chrominance pixel value.

4. The image processing circuit of claim 1 wherein the threshold value is within a range of approximately 50 - 80.

5. The image processing circuit of claim 1 wherein the compensation value comprises a randomly generated value.

6. The image processing circuit of claim 1 wherein the compensation value comprises a randomly generated value within a range of –3 – 3.

7. The image processing circuit of claim 1 wherein the pixel circuit is further operable to:

determine whether the sum of the pixel and compensation values is within a predetermined range of pixel values; and

set the pixel value equal to a value within the range if the sum is outside of the range.

8. The image processing circuit of claim 1 wherein the pixel circuit is operable to modify the pixel value if the pixel value is less than the threshold value.

9. The image processing circuit of claim 1 wherein the pixel circuit comprises a processor.

10. The image processing circuit of claim 1 wherein the pixel circuit is operable to modify the pixel value by adding a compensation value to the pixel value.

11. An image processing circuit, comprising:

a pixel circuit operable to,

generate a random number, and

combine the random number with a pixel value.

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12. The image processing circuit of claim 11 wherein the pixel circuit is further operable to truncate the random number before combining the random number with the pixel value.

13. The image processing circuit of claim 11 wherein the pixel circuit is further operable to clip the pixel value if the pixel value is outside of a predetermined range.

14. The image processing circuit of claim 11 wherein the pixel circuit is operable to add the random number to the pixel value.

15. An image processing circuit, comprising:

a pixel circuit operable to,

compare a first pixel value to a first threshold value, the first pixel value corresponding to a pixel location in a first video frame,

add a first compensation value to the first pixel value if the first pixel value is less than the first threshold value,

compare a second pixel value to a second threshold value, the second pixel value corresponding to the pixel location in a second video frame, and

add a second compensation value to the second pixel value if the second pixel value is less than the second threshold value.

16. The image processing circuit of claim 15 wherein the first and second pixel values comprise respective luminance pixel values.

17. The image processing circuit of claim 15 wherein the first and second pixel values comprises respective chrominance pixel values.

18. The image processing circuit of claim 15 wherein the first and second threshold values are within a range of approximately 50 - 80.

19. The image processing circuit of claim 15 wherein the first threshold value equals the second threshold value.

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20. The image processing circuit of claim 15 wherein the first and second compensation values comprise respective randomly generated numbers.

21. The image processing circuit of claim 15 wherein the first compensation value equals the second compensation value.

22. The image processing circuit of claim 15 wherein the first and second compensation values comprise respective randomly generated numbers within a range of –3 – 3.

23. The image processing circuit of claim 15 wherein the pixel circuit is further operable to:

compare the first sum of the first pixel and first compensation values and the second sum of the second pixel and second compensation values to zero; and

set the first pixel value equal to zero if the first sum is less than zero and set the second pixel value equal to zero if the second sum is less than zero.

24. An image processing circuit, comprising:

a pixel circuit operable to,

generate a first random number using a first seed number,

compare a first pixel value to a first threshold value,

add the first random number to the first pixel value if the first pixel value is less than the first threshold value,

generate a second random number using a second seed number,

compare a second pixel value to a second threshold value, and

add the second random number to the second pixel value if the second pixel value is less than the second threshold value.

25. The image processing circuit of claim 24 wherein the pixel circuit is operable to:

truncate the first random number before adding the first random number to the first pixel value; and

truncate the second random number before adding the second random number to the second pixel value.

26. The image processing circuit of claim 24 wherein the second seed number equals the first random number.

27. The image processing circuit of claim 24 wherein the second seed number equals the first seed number.

28. The image processing circuit of claim 24 wherein the pixel circuit is operable to:

truncate the first random number before adding the first random number to the first pixel value;

truncate the second random number before adding the second random number to the second pixel value;

set the second seed number equal to the untruncated first random number.

29. The image processing circuit of claim 24 wherein the pixel circuit is operable to generate the first and second random numbers using the following equation:

$random\ number = (1664525 \times seed\ number + 1013904223) \bmod 2^{32}$.

30. The image processing circuit of claim 24 wherein:

the first pixel value corresponds to a first pixel location in an image; and

the second pixel value corresponds to a second pixel location in the image, the second pixel location contiguous with the first pixel location.

31. An image processing circuit, comprising:

a pixel circuit operable to,

generate a first random number using a first seed number,

compare a first pixel value to a first threshold value, the first pixel value corresponding to a starting pixel location in a first video frame

add the first random number to the first pixel value if the first pixel value is less than the first threshold value,

generate a second random number using a second seed number,

compare a second pixel value to a second threshold value, the second pixel value corresponding to a starting pixel location in a second video frame, and

add the second random number to the second pixel value if the second pixel value is less than the second threshold value.

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32. The image processing circuit of claim 31 wherein the second seed number equals the first seed number.

33. The image processing circuit of claim 31 wherein the pixel circuit is further operable to:

generate a third random number using a third seed number;

compare a third pixel value to a third threshold value, the third pixel value corresponding to an ending pixel location in the first video frame;

add the third random number to the third pixel value if the third pixel value is less than the third threshold value; and

set the second seed number equal to the third random number.

34. An image processing circuit, comprising:

a pixel circuit operable to,

generate a first random number,

add the first random number to a first pixel value,

generate a second random number, and

add the second random number to a second pixel value.

35. The image processing circuit of claim 34 wherein the pixel circuit is operable to generate the first and second random numbers from respective first and second seed numbers.

36. The image processing circuit of claim 34 wherein the pixel circuit is operable to:

generate the first random number from a seed number; and

generate the second random number from the first random number.

37. The image processing circuit of claim 34 wherein:

the first pixel value corresponds to a pixel location in a first video frame;

the second pixel value corresponds to the pixel location in a second video frame; and

the first random number equals the second random number.

38. The image processing circuit of claim 34 wherein:

the first pixel value corresponds to a starting pixel location in a first video frame;

the second pixel value corresponds to the pixel location in a second video frame; and

the first random number does not equal the second random number.

39. A circuit, comprising:

a comparator having a pixel-value input terminal and first and second pixel-value output terminals;

a random-number generator having a seed input terminal and a random-number output terminal;

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a combiner having a first input terminal coupled to the first pixel-value output terminal, a second input terminal coupled to the random-number output terminal, and a combiner output terminal; and

an image buffer having a first input terminal coupled to the second pixel-value output terminal and having a second input terminal coupled to the combiner output terminal.

40. The circuit of claim 39 wherein the comparator is operable to receive a pixel value on the pixel-value input terminal, provide the pixel value on the first pixel-value output terminal if the pixel value is less than a threshold value, and provide the pixel value on the second pixel-value output terminal if the pixel value is greater than the threshold value.

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41. The circuit of claim 39 wherein the random-number output terminal is coupled to the seed input terminal.

42. The circuit of claim 39 wherein the combiner comprises a summer.

43. The circuit of claim 39, further comprising a random-number truncator disposed between the random-number generator and the combiner, the truncator having an input terminal coupled to the random-number output terminal of the random-number generator and having an output terminal coupled to the second input terminal of the combiner.

44. The circuit of claim 39, further comprising a clipper disposed between the combiner and the image buffer, the clipper having an input terminal coupled to the combiner output terminal and having an output terminal coupled to the second input terminal of the image buffer.

45. A method, comprising:

comparing a pixel value to a threshold value; and

modifying the pixel value if the pixel value has a predetermined relationship to the threshold value.

46. The method of claim 45, further comprising:

generating a random number; and

setting the compensation value equal to the random number.

47. The method of claim 45, further comprising:

generating a random number;

truncating the random number to a number within a range of –3 – 3; and

setting the compensation value equal to the truncated random number.

48. The method of claim 45, further comprising:

determining whether the sum of the pixel and compensation values is within a predetermined range of pixel values; and

setting the pixel value equal to a value within the range if the sum is outside of the range.

49. The method of claim 45 wherein the modifying comprises modifying the pixel value if the pixel value is less than the threshold value.

50. The method of claim 45 wherein the modifying comprises adding a compensation value to the pixel value.

51. A method, comprising:

generating a random number; and

combining the random number with a pixel value.

52. The method of claim 51, further comprising truncating the random number before combining the random number with the pixel value.

53. The method of claim 51, further comprising clipping the pixel value if the pixel value is outside of a predetermined range.

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54. A method, comprising:

comparing a first pixel value to a first threshold value, the first pixel value corresponding to a pixel location in a first video frame;

adding a first compensation value to the first pixel value if the first pixel value is less than the first threshold value;

comparing a second pixel value to a second threshold value, the second pixel value corresponding to the pixel location in a second video frame; and

adding a second compensation value to the second pixel value if the second pixel value is less than the second threshold value.

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55. The method of claim 54 wherein the first threshold value equals the second threshold value.

56. The method of claim 54 wherein the first and second compensation values equal the same randomly generated number.

57. The method of claim 54, further comprising:

comparing a first sum of the first pixel and first compensation values to zero;

setting the first pixel value equal to zero if the first sum is less zero;

comparing a second sum of the second pixel and second compensation values to zero; and

setting the second pixel value equal to zero if the second sum is less than zero.

58. A method, comprising:

generating a first random number using a first seed number;

comparing a first pixel value to a first threshold value;

adding the first random number to the first pixel value if the first pixel value is less than the first threshold value;

generating a second random number using a second seed number;

comparing a second pixel value to a second threshold value; and

adding the second random number to the second pixel value if the second pixel value is less than the second threshold value.

59. The method of claim 58 wherein:

the generating the first random number comprises truncating the first random number; and

the generating the second random number comprises truncating the second random number.

60. The method of claim 58 wherein the second seed number equals the first random number.

61. The method of claim 58 wherein the second seed number equals the first seed number.

62. The method of claim 58 wherein the generating the first and second random numbers comprises generating the first and second random numbers according to the following equation:

random number = (1664525 x *seed number* + 1013904223)mod 2^{32}.

63. A method, comprising:

generating a first random number using a first seed number;

comparing a first pixel value to a first threshold value, the first pixel value corresponding to a starting pixel location in a first video frame;

adding the first random number to the first pixel value if the first pixel value is less than the first threshold value;

generating a second random number using a second seed number;

comparing a second pixel value to a second threshold value, the second pixel value corresponding to a starting pixel location in a second video frame; and

adding the second random number to the second pixel value if the second pixel value is less than the second threshold value.

64. The method of claim 63, further comprising setting the second seed number equal to the first seed number.

65. The method of claim 63, further comprising:

generating a third random number using a third seed number;

comparing a third pixel value to a third threshold value, the third pixel value corresponding to an ending pixel location in the first video frame;

adding the third random number to the third pixel value if the third pixel value is less than the third threshold value; and

setting the second seed number equal to the third random number.

66. A method, comprising:

generating a first random number;

adding the first random number to a first pixel value;

generating a second random number; and

adding the second random number to a second pixel value.

67. The method of claim 66 wherein the generating the first and second random numbers comprises generating the first and second random numbers from respective first and second seed numbers.

68. The method of claim 66 wherein:

the generating the first random number comprises generating the first random number from a seed number; and

the generating the second random number comprises generating the second random number from the first random number.

69. The method of claim 66 wherein:

the first pixel value corresponds to a pixel location in a first video frame;

the second pixel value corresponds to the pixel location in a second video frame; and

the generating the second random number comprises generating the second random equal to the first random number.

70. The method of claim 66 wherein:

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the first pixel value corresponds to a starting pixel location in a first video frame;

the second pixel value corresponds to the pixel location in a second video frame; and

the generating the second random number comprises generating the second random number unequal to the first random number.